



REPLACEMENT SHEET

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Fig. 1

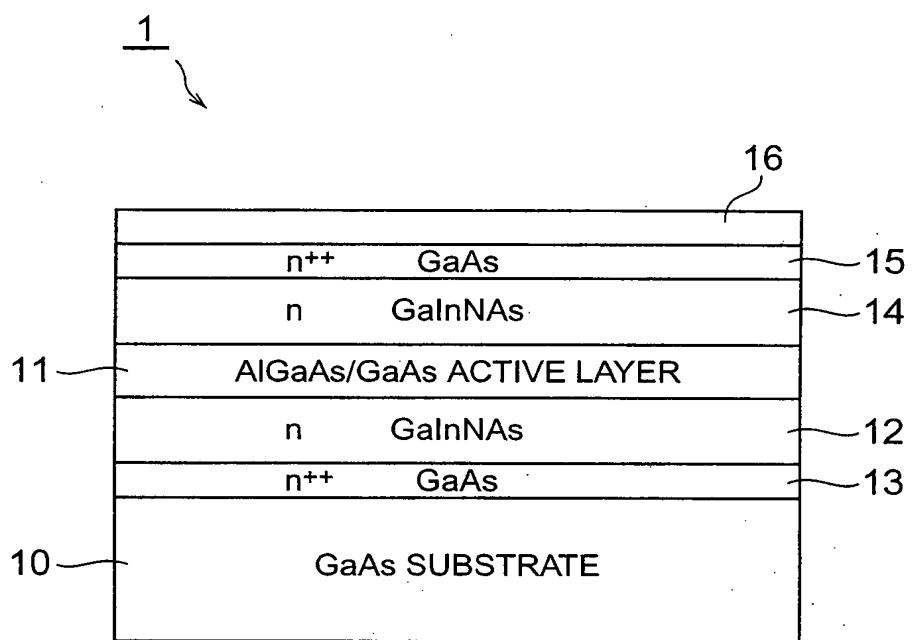


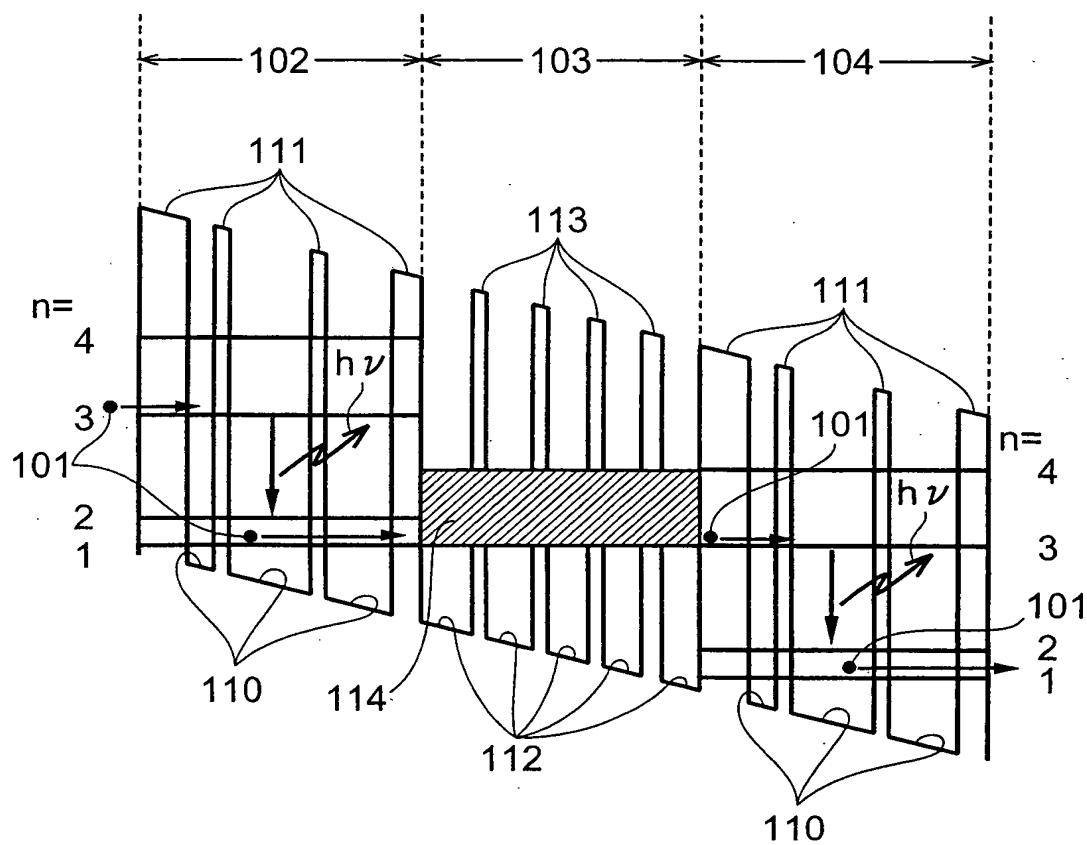
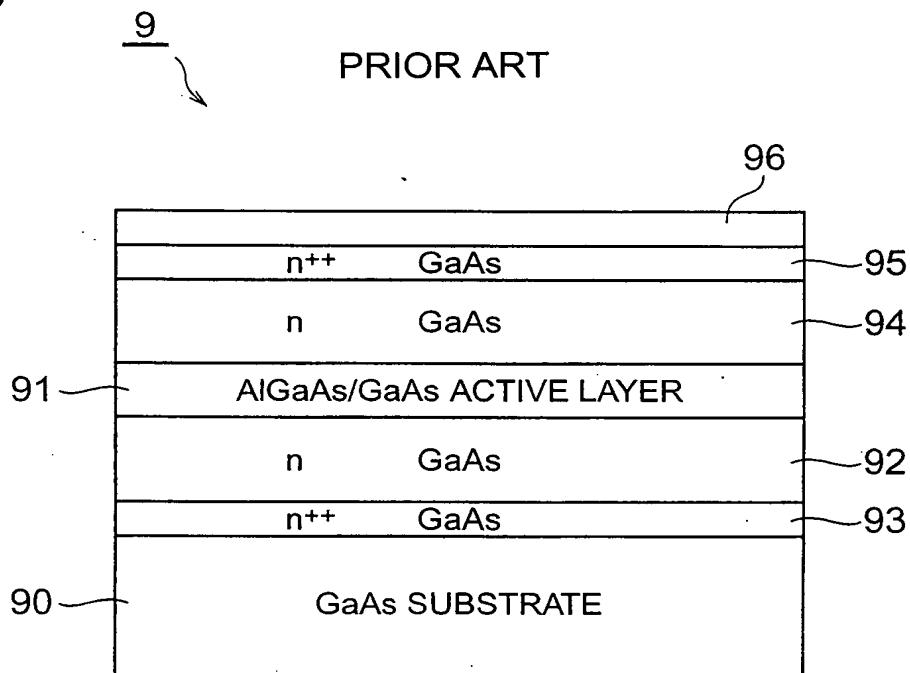
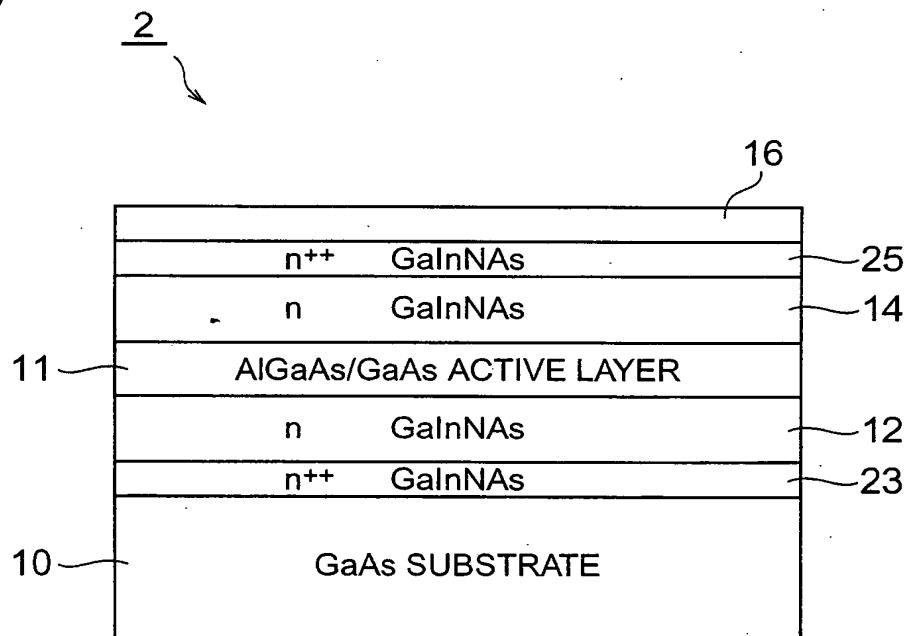
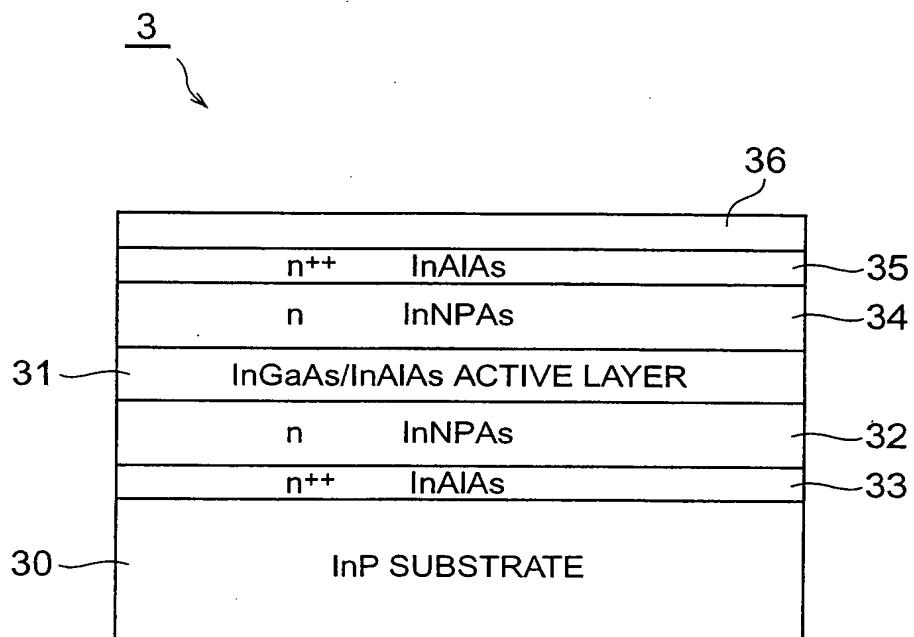
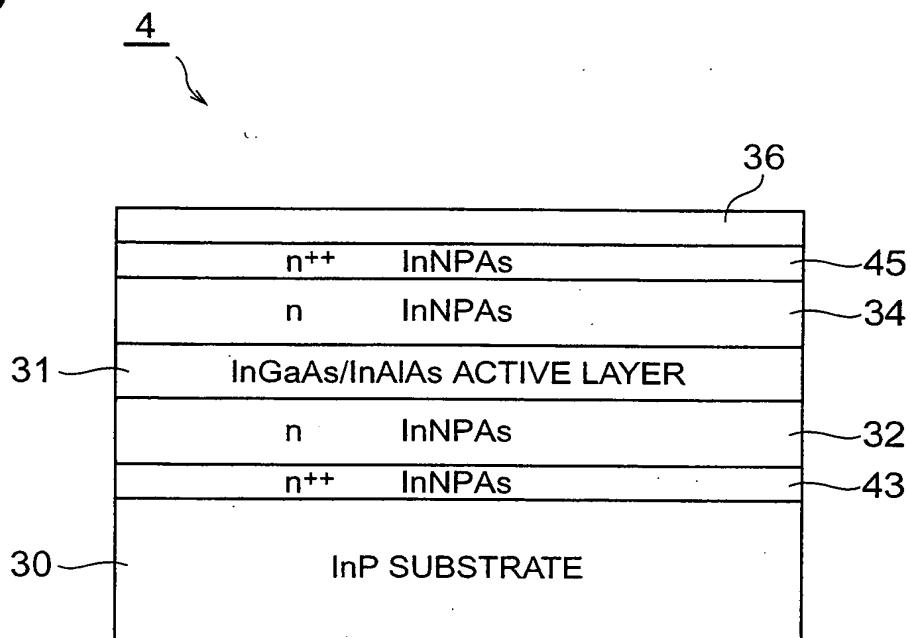
Fig.2

Fig.3**Fig.4**

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Fig.5**Fig.6**

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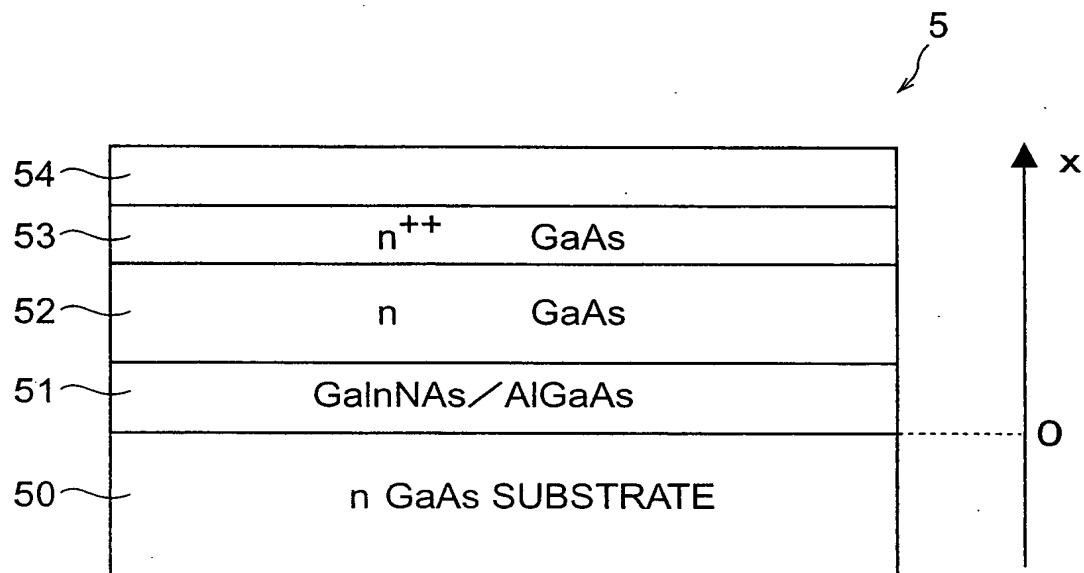
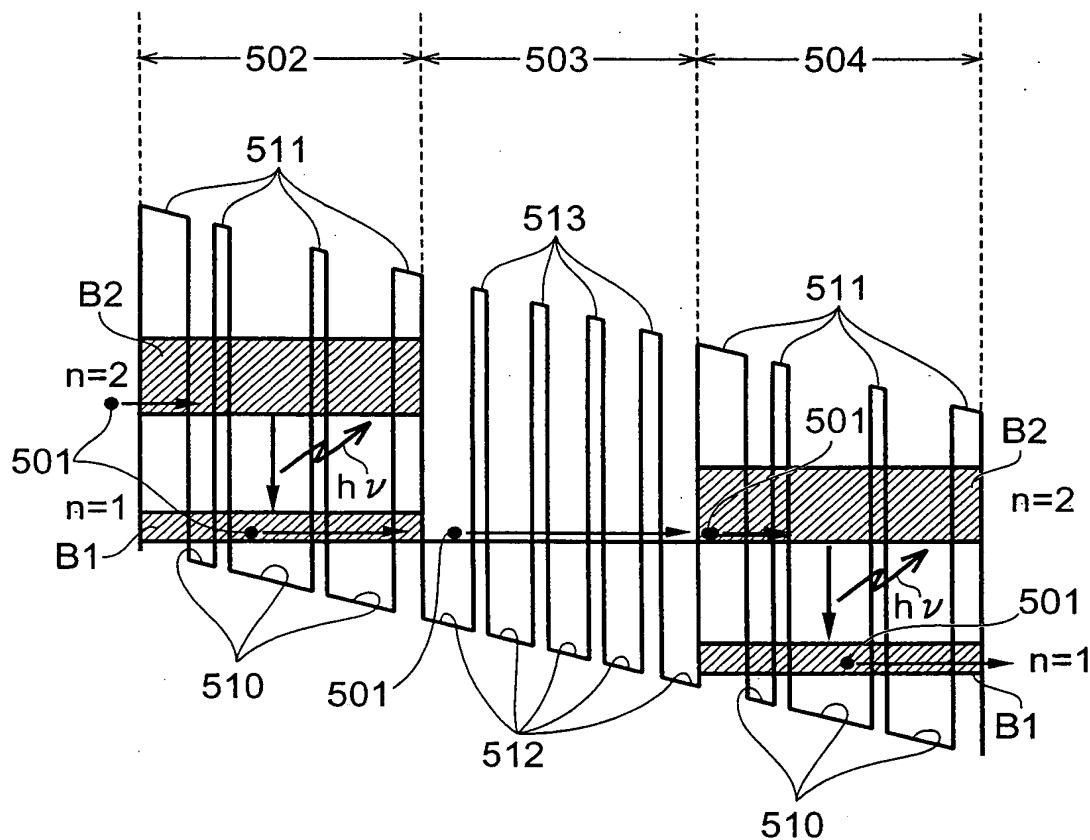
Fig.7

Fig.8

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Fig.9

	LAYER COMPOSITION	THICKNESS(nm)	CARRIER DENSITY (cm^{-3})
INJECTION LAYERS	GalnNAs	2.1	UNDOPE
	AlGaAs	2.5	UNDOPE
	GalnNAs	2.3	1.6×10^{17}
	AlGaAs	2.5	1.6×10^{17}
	GalnNAs	2.3	1.6×10^{17}
	AlGaAs	2.3	1.6×10^{17}
	GalnNAs	2.8	UNDOPE
	AlGaAs	2.0	UNDOPE
	GalnNAs	3.2	UNDOPE
QUANTUM WELL LIGHT EMITTING LAYERS	AlGaAs	3.4	UNDOPE
	GalnNAs	4.0	UNDOPE
	AlGaAs	1.7	UNDOPE
	GalnNAs	4.9	UNDOPE
	AlGaAs	2.0	UNDOPE
	GalnNAs	1.5	UNDOPE
	AlGaAs	5.8	UNDOPE

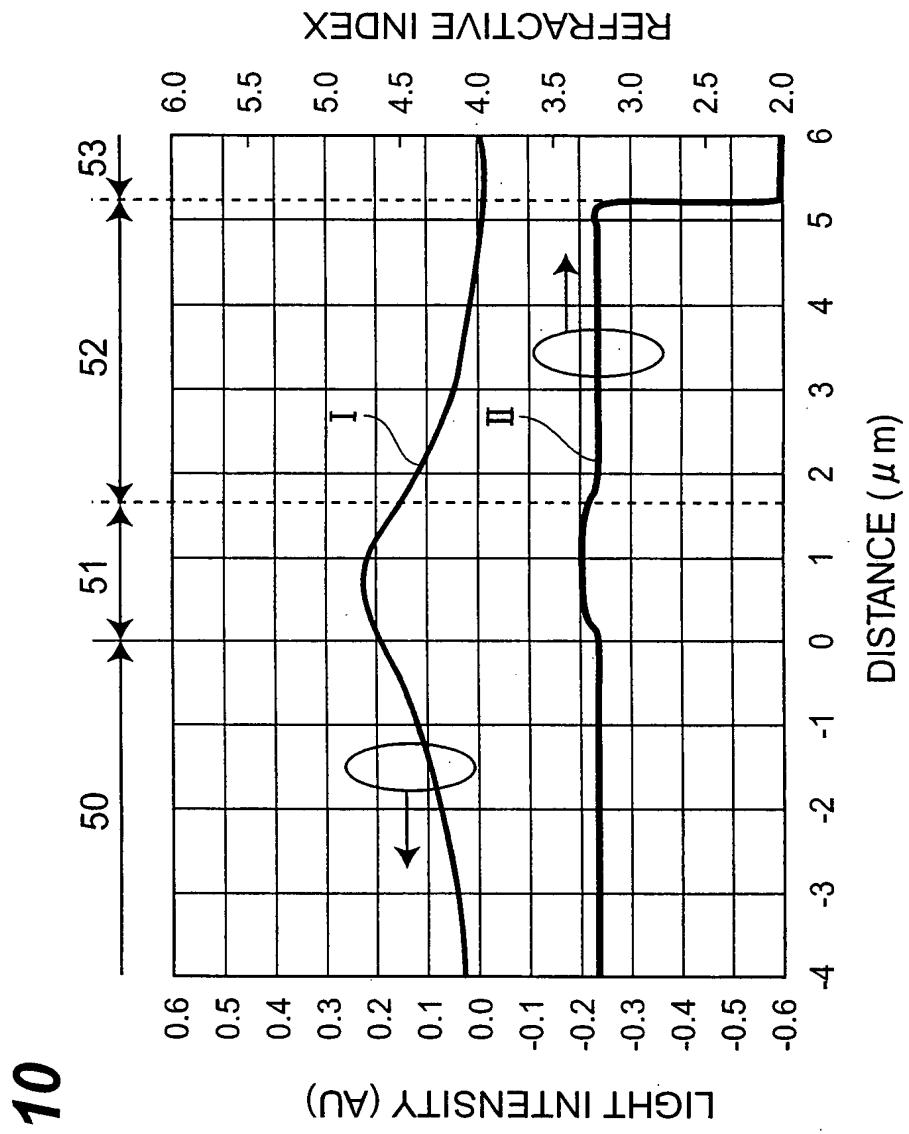
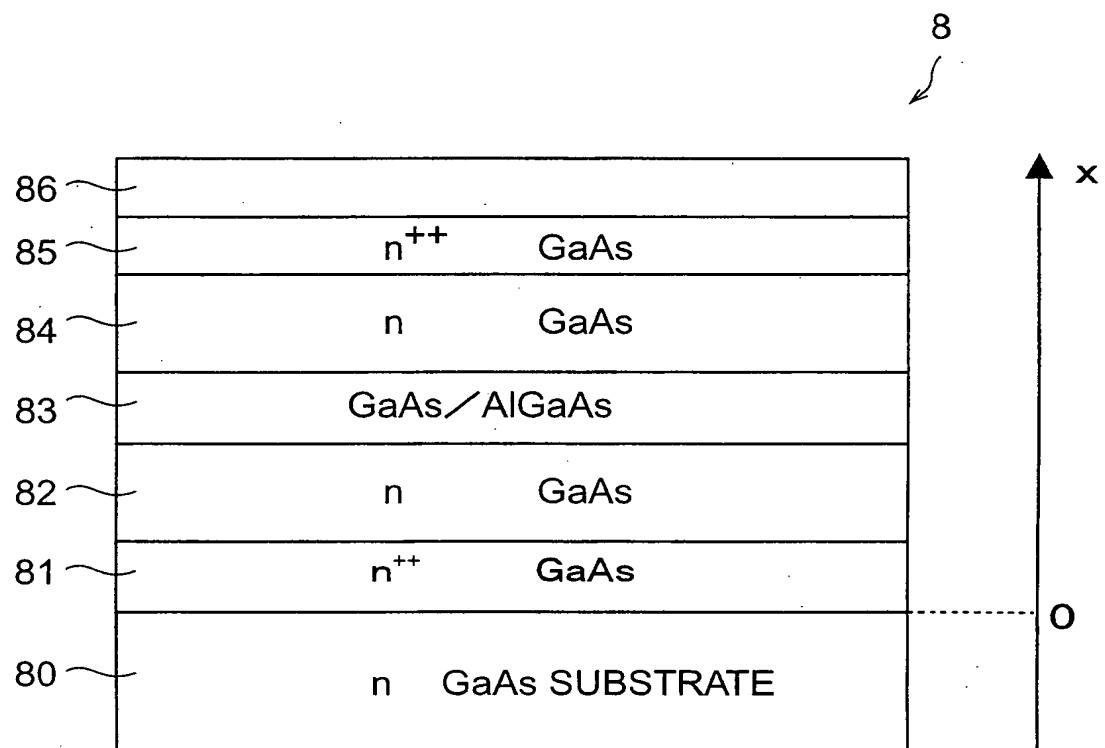


Fig.10

Fig.11

PRIOR ART



REPLACEMENT SHEET

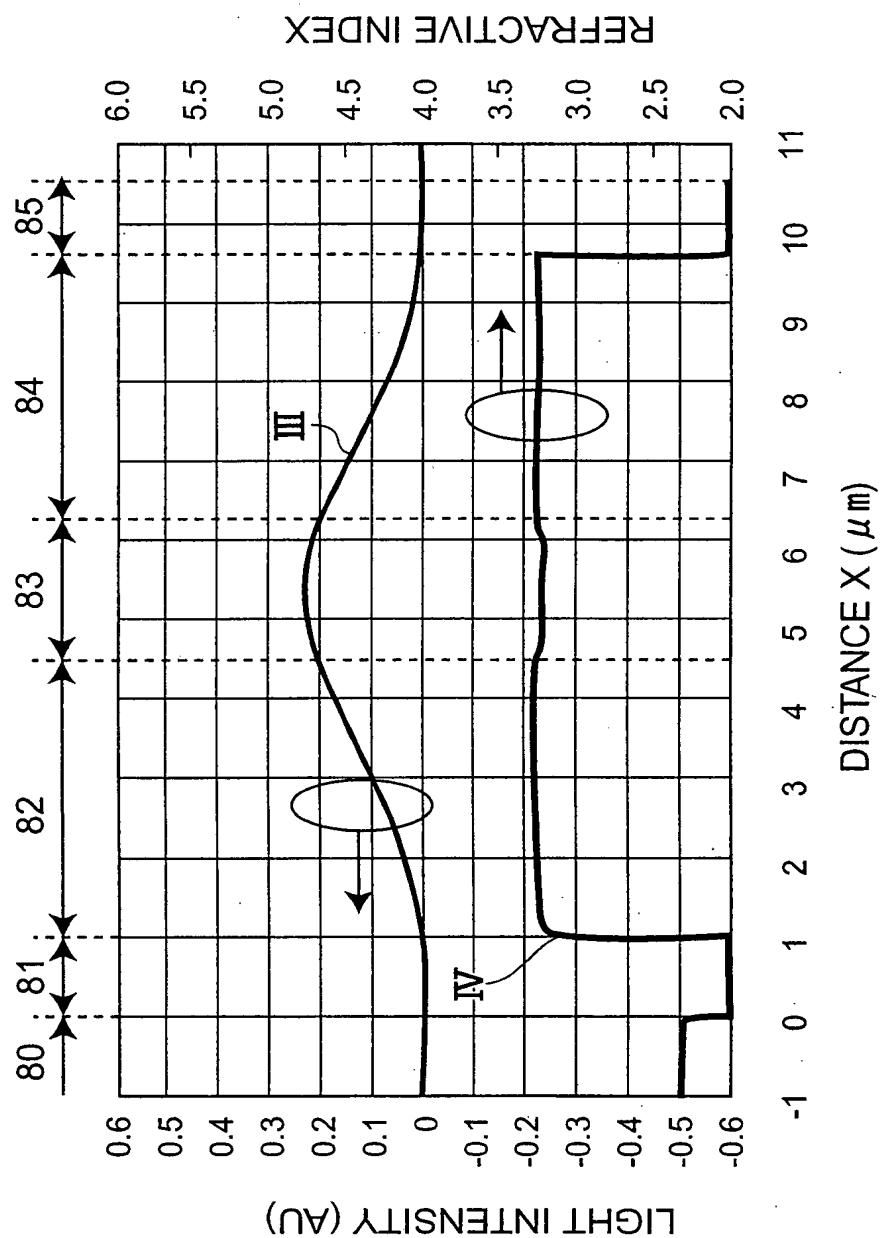
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Fig.12 PRIOR ART

	LAYER COMPOSITION	THICKNESS(nm)	CARRIER DENSITY (cm ⁻³)
INJECTION LAYERS	GaAs	2.1	UNDOPE
	AlGaAs	2.5	UNDOPE
	GaAs	2.3	1.6×10^{17}
	AlGaAs	2.5	1.6×10^{17}
	GaAs	2.3	1.6×10^{17}
	AlGaAs	2.3	1.6×10^{17}
	GaAs	2.8	UNDOPE
	AlGaAs	2.0	UNDOPE
	GaAs	3.2	UNDOPE
QUANTUM WELL LIGHT EMITTING LAYERS	AlGaAs	3.4	UNDOPE
	GaAs	4.0	UNDOPE
	AlGaAs	1.7	UNDOPE
	GaAs	4.9	UNDOPE
	AlGaAs	2.0	UNDOPE
	GaAs	1.5	UNDOPE
	AlGaAs	5.8	UNDOPE

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Fig. 13



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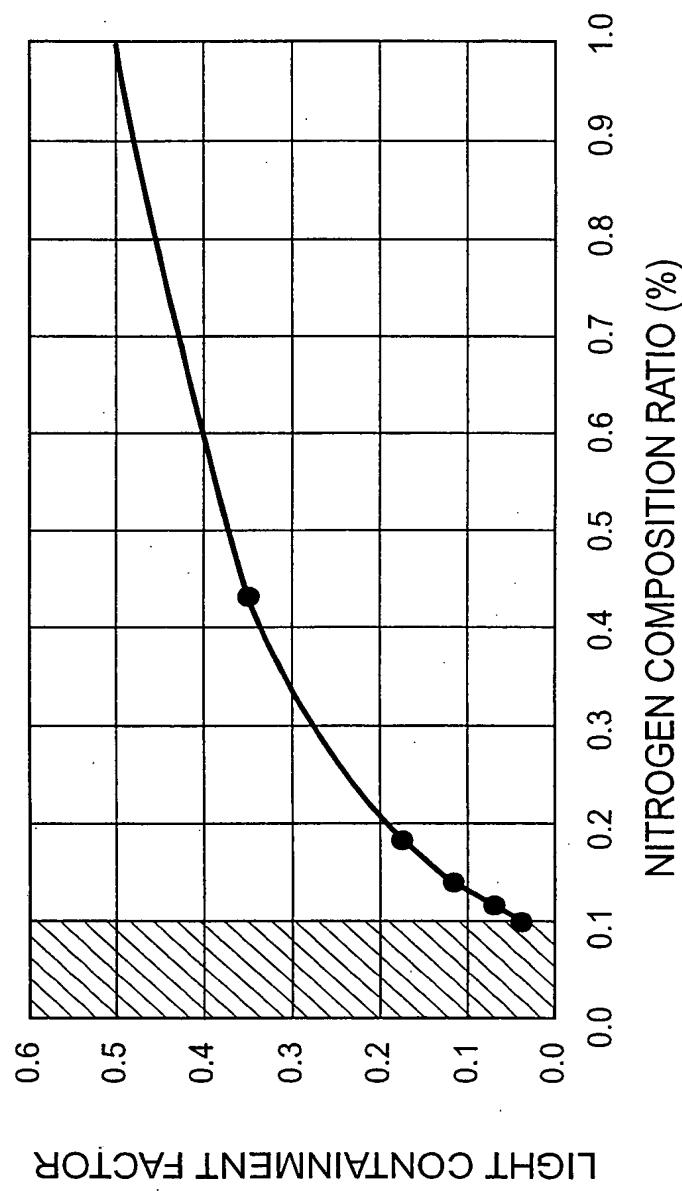
Fig. 14

Fig. 15 PRIOR ART

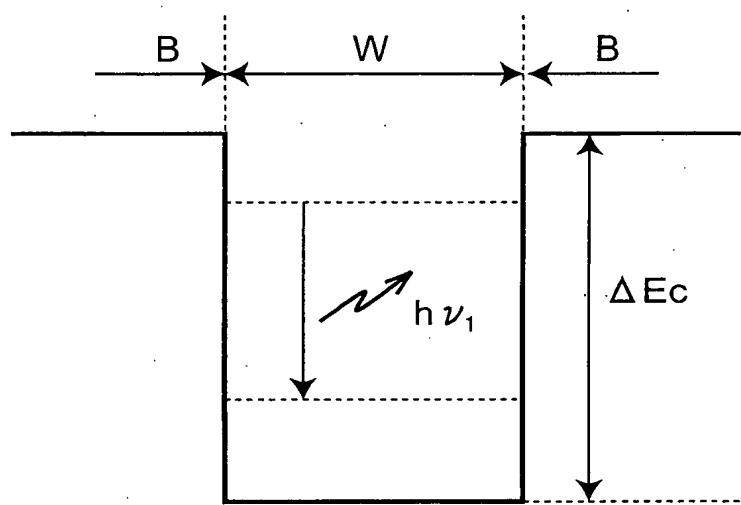
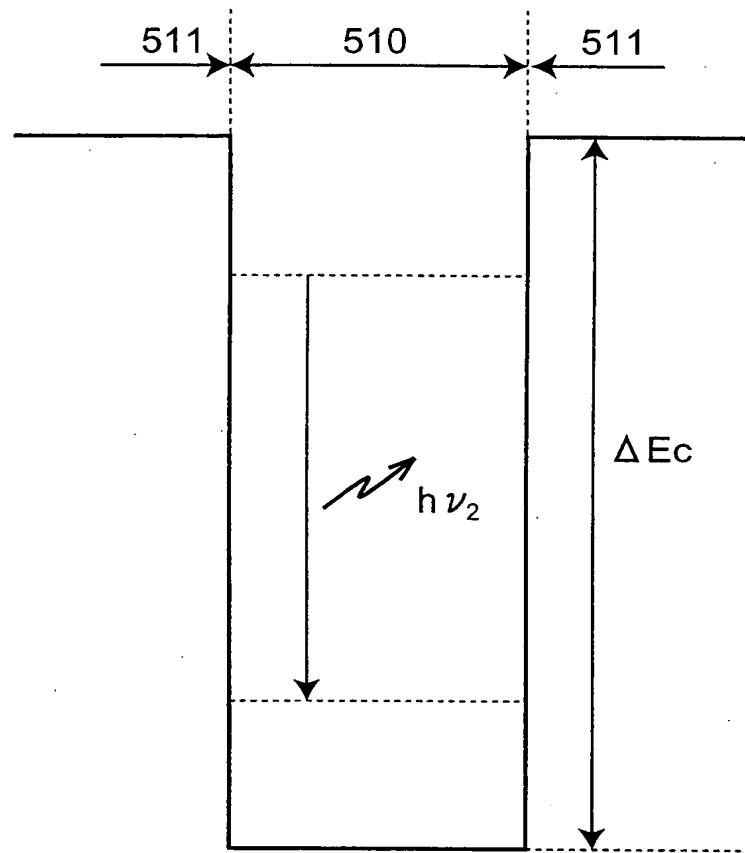
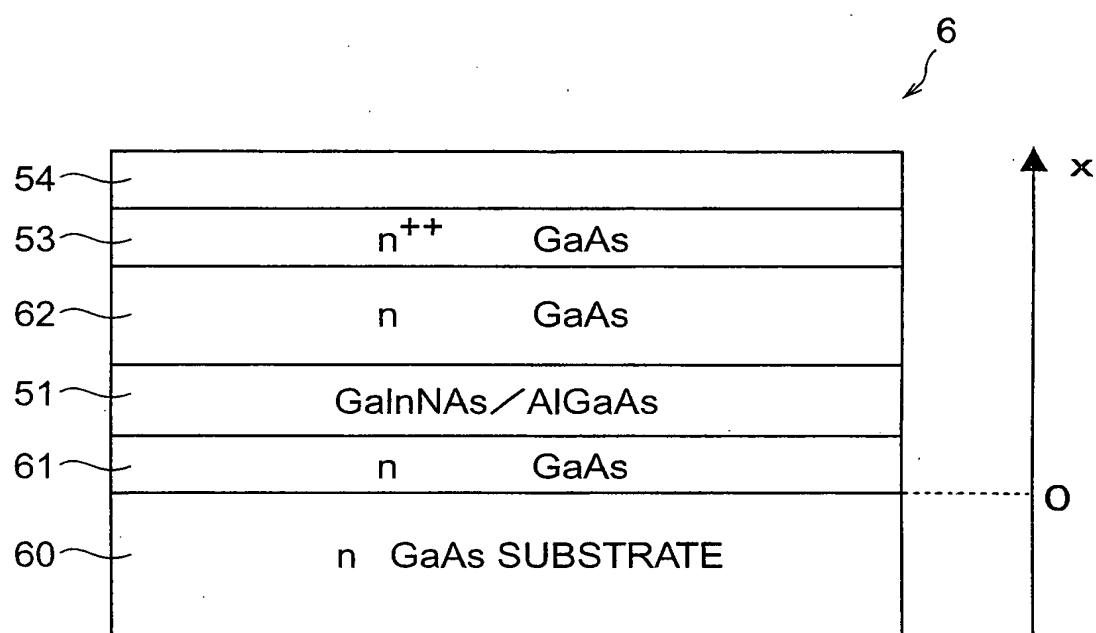


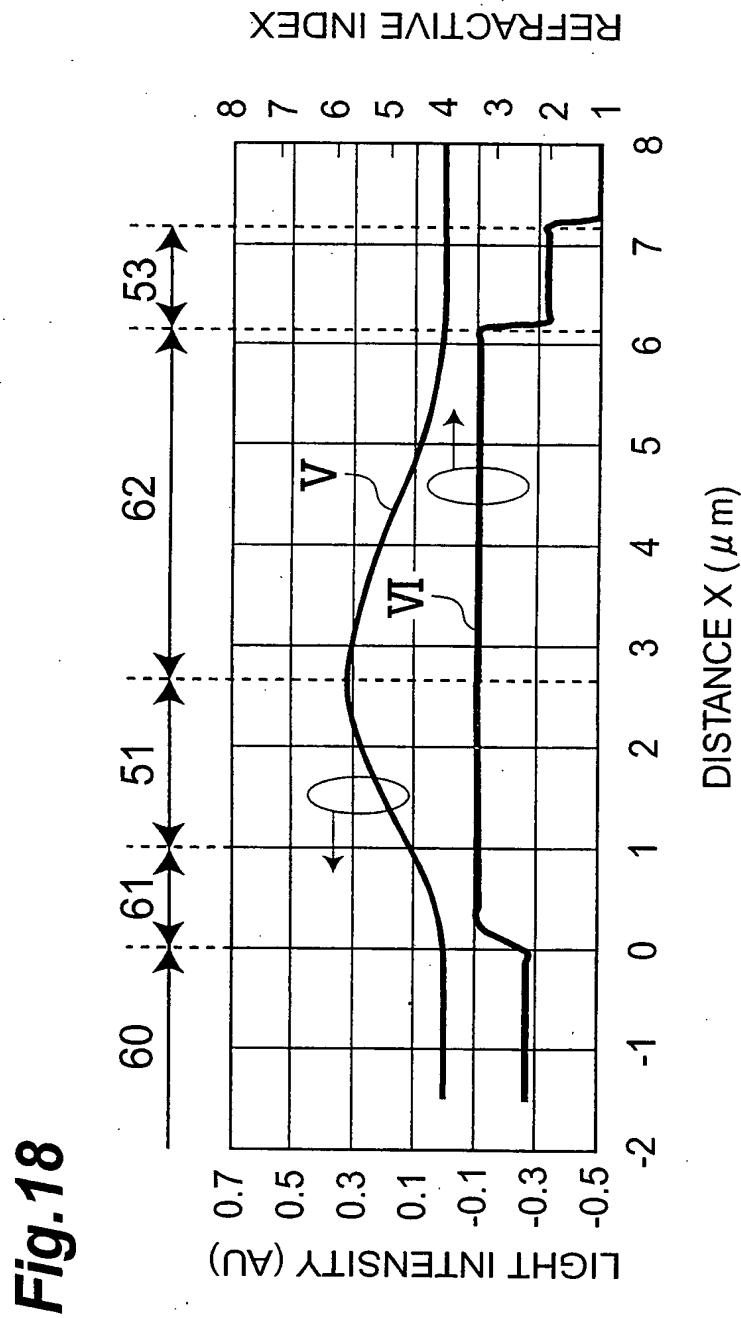
Fig. 16

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Fig. 17





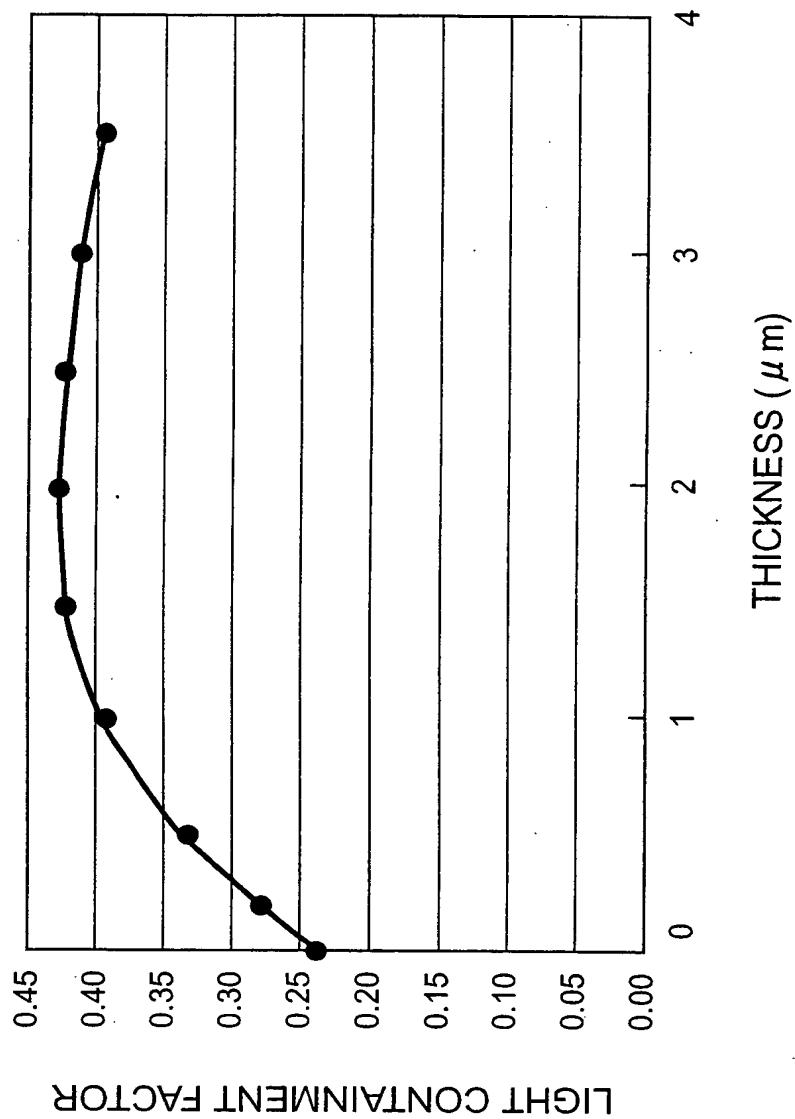
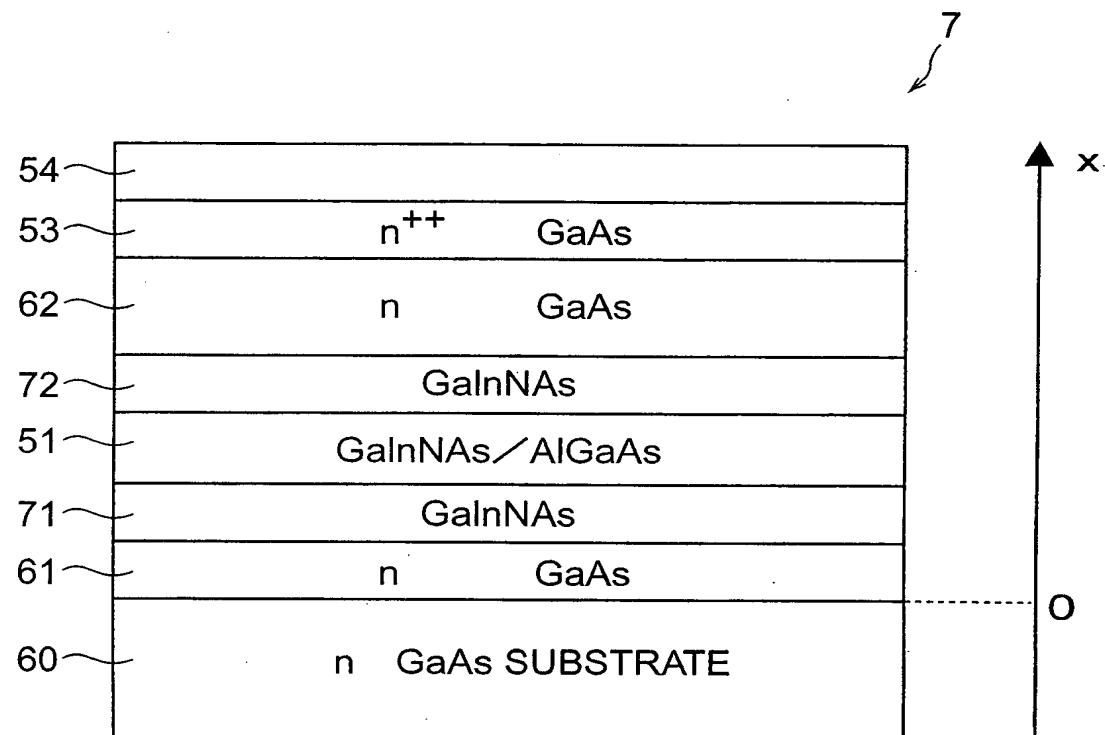


Fig. 19

Fig.20

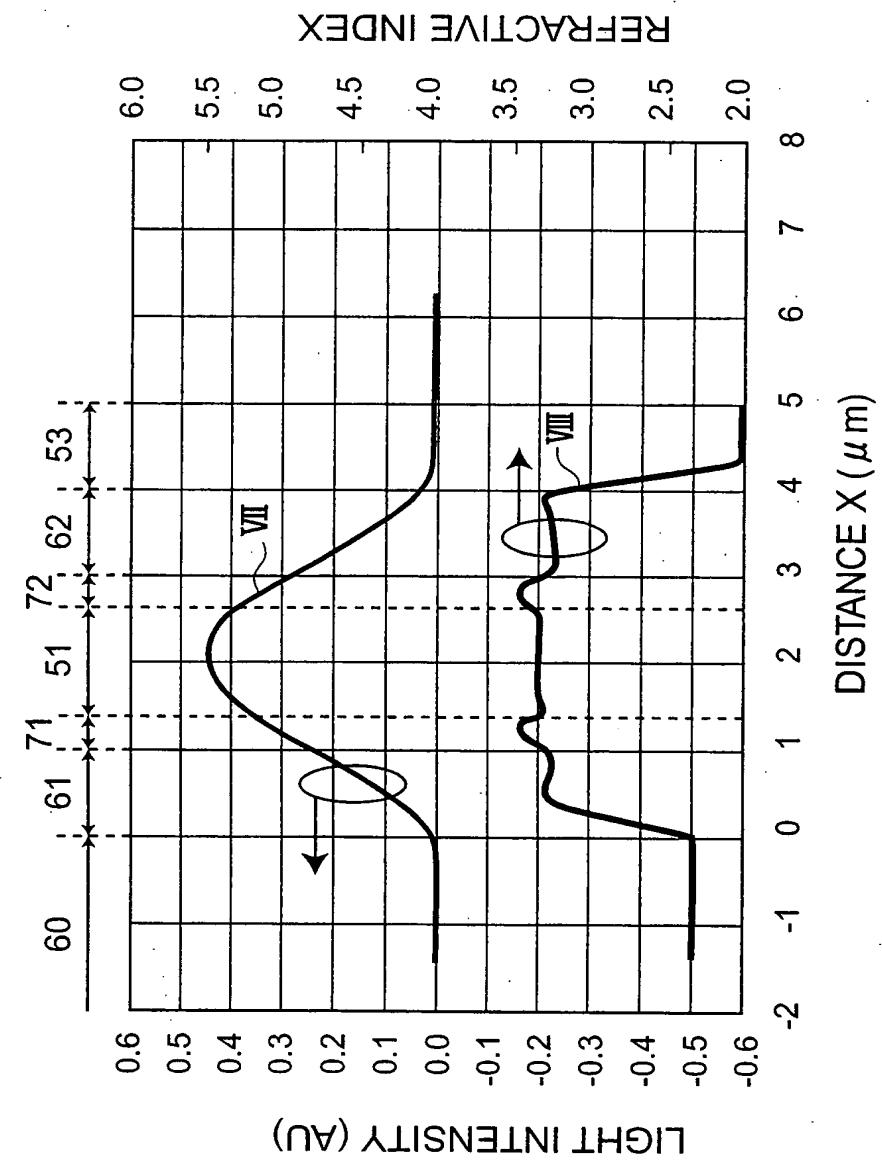


Fig.21